

**IT IS THE VENDOR'S RESPONSIBILITY TO
CHECK FOR ADDENDUM PRIOR TO SUBMITTING PROPOSALS**

**NOTICE TO BIDDERS
SPECIFICATION NO. 05-140**

The City of Lincoln, Nebraska intends to purchase and invites you to submit a sealed bid for:

**RECONDITION AND INSTALL KNUCKLE BOOM LOADER
AND
MISCELLANEOUS ASSOCIATED EQUIPMENT**

Sealed bids will be received by the City of Lincoln, Nebraska on or before 12:00 noon Wednesday, June 15, 2005 in the office of the Purchasing Agent, Suite 200, K Street Complex, Southwest Wing, 440 South 8th Street, Lincoln, Nebraska 68508. Bids will be publicly opened and read at the K Street Complex.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division, prior to the time and date specified above. Late bids will not be considered. **Fax or e-mail bids are not acceptable. Bid response must be in a sealed envelope.**

EQUIPMENT SPECIFICATIONS
FOR THE RECONDITION AND INSTALL KNUCKLE BOOM LOADER
AND MISCELLANEOUS ASSOCIATED EQUIPMENT

1. APPLICATION

- 1.1 This loader and accessory equipment will be mounted on a new 2006, 35,000 GVWR, 120" CA cab and chassis for use by the City of Lincoln in tree removal operations.
- 1.2 General specifications of cab and chassis will be provided upon request.

2. INTENT OF SPECIFICATIONS

- 2.1 The intent of this specification is to describe the removal, reconditioning and installation of a City owned truck mounted hydraulic knuckle boom loader.
- 2.2 Equipment and labor provided by the City as follows:
 - 2.2.1 No labor or transportation will be provided by the City.
 - 2.2.2 A new 2006, 35,000 GVWR, 120" CA cab and chassis.
 - 2.2.3 A used 1990, Prentice Model 120 RM hydraulic knuckle boom loader .
- 2.3 Equipment and labor provided by the successful bidder as follows:
 - 2.3.1 Transportation of the new cab and chassis from Lincoln NE. to the successful bidders places of business and delivery of completed unit.
 - 2.3.1.1 Drop shipment of new cab and chassis to successful bidders place of business will be provided if requested.
 - 2.3.2 Transportation of existing truck mounted hydraulic knuckle boom loader from Lincoln NE. to the successful bidders place of business and delivery of cab and chassis, grapple and PTO/pump following hydraulic knuckle boom loader removal.
 - 2.3.2.1 Consideration should be given to trucking existing unit as the successful bidder will be responsible for any and all required repairs associated with transportation.
 - 2.3.3 Removal and reconditioning of used hydraulic knuckle boom loader as specified.
 - 2.3.4 Installation of reconditioned hydraulic knuckle boom loader as specified.

3. SPECIAL INSTRUCTIONS

- 3.1 It is the responsibility of the bidder to inspect the existing hydraulic knuckle boom loader and associated equipment and to include in the bid any and all costs required for needed repairs and a neat professional installation whether or not specifically addressed in the specifications.
- 3.2 Please contact Jim Chiles @ 402-441-4941 to schedule inspection of the hydraulic knuckle boom loader.
- 3.3 The complete project will be accomplished between Tuesday November 1, 2005 and Wednesday November 30, 2005.
 - 3.3.1 This time frame includes all transportation and delivery time.
- 3.4 The City of Lincoln will retain ownership of the existing cab and chassis, grapple and PTO/pump.
- 3.5 Disposal of all other replaced components or equipment will be the responsibility of the successful bidder.
- 3.6 All components and materials furnished will be new OEM equivalent and installed in a

neat and professional manner.

Meets Specs.

Yes No

4. **PTO AND DRIVE**

- 4.1 Furnish and install new PTO (Muncie Series CS20 or equal)
 - 4.1.1 Hot shift design.
 - 4.1.2 Pressure lubricated.
 - 4.1.3 Activation through Allison transmission shift pad mode button.
 - 4.1.4 Pressure activated demand type throttle control, adjusted to recommended pump RPM.
- 4.2 Furnish and install new PTO shaft.
 - 4.2.1 Minimum Spicer 1310 drive components.
 - 4.2.2 Slip yoke design with greasable yoke and joints.
 - 4.2.3 Shaft to be professionally balanced for smooth operation.

5. **HYDRAULIC PUMP**

- 5.1 Furnish and install new hydraulic pump.
 - 5.1.1 Cast iron construction tandem gear set
21 + 24 GPM @ 2500 psi.
 - 5.1.2 Maximum pump speed 1,200 RPM.
 - 5.1.3 Pump will be transmission PTO driven, securely mounted to truck frame.

6. **HYDRAULIC SYSTEM REQUIREMENT**

- 6.1 Replace all hydraulic hoses and swivels.
 - 6.1.1 All exposed hoses which may contact limbs and branches will be shielded with Parker APolyGuard® hose protector.
- 6.2 Disassemble, inspect and reseal hydraulic components as follows:
 - 6.2.1 Outrigger cylinders.
 - 6.2.2 Boom cylinder.
 - 6.2.3 Stick cylinder.
 - 6.2.4 Extension cylinder.
 - 6.2.5 Swing rotation manifold.
 - 6.2.6 Swing motor.
 - 6.2.7 Loader control and selector valves.
 - 6.2.8 Winch directional valve and motor.
- 6.3 Furnish and install new hydraulic oil cooler.
- 6.4 Clean and flush hydraulic fluid reservoir and screens.
- 6.5 Furnish and install new hydraulic oil filter(s) and fill system with Mobil DTE 13 hydraulic oil.
- 6.6 Check and adjust all holding valves.
- 6.7 Check and adjust all relief settings, check for leaks and run complete operational test.

7. **STRUCTURAL AND DRIVE COMPONENTS**

- 7.1 Inspect slewing ring and pinion for tooth and axial wear.
 - 7.1.1 Is slewing ring and pinion gear replacement recommended?
___yes___ no.
- 7.2 Replace all inner and outer slewing ring bolts and tighten to proper torque.

7. **STRUCTURAL AND DRIVE COMPONENTS** cont.

Meets Specs.

Yes No

___ ___

___ ___

___ ___

7.3 Disassemble, inspect and reseal swing gear box.

7.3.1 Fill with proper lubricant and install with new mounting bolts and tighten to proper torque.

7.4 Replace all hydraulic knuckle boom loader and platform mounting hardware.

8. **WEAR ITEMS**

___ ___

___ ___

___ ___

8.1 Replace bushings and grease fittings at all pivot points.

8.2 Inspect pins for visual deficiencies at all pivot points.

8.2.1 Is replacement of all pins recommended? ___ yes ___ no.

8.2 Replace all wear pads and mounting hardware.

9. **GRAPPLE**

___ ___

___ ___

___ ___

___ ___

___ ___

___ ___

9.1 Furnish and install new grapple, rotator and hanger as follows:

9.1.1 Grapple provided will be functionally identical to the existing equipment and meet or exceed existing component capacities.

9.1.2 Rotator provided will meet or exceed existing rotator capacities and will be **continuous rotation** design.

9.1.3 Hanger provided will be friction disc design to control sway and meet or exceed existing hanger capacity.

9.1.4 Please include make, model and specifications of grapple, rotator and hanger being provided.

10. **PLATFORM AND GRAPPLE STOW ASSEMBLY**

___ ___

___ ___

___ ___

___ ___

___ ___

___ ___

10.1 Complete platform floor will be removed and replaced with 3/16" steel tread plate.

10.2 Grapple stow and bumper will be removed modified as required and reinstalled on new chassis.

10.2.1 New chassis will have a tilt hood with stationary grill and 24" integral front frame extension.

10.2.2 Grapple stow and bumper must be designed in a manner as to allow the hood to tilt to the full open position when grapple is not in the stowed position.

11. **PAINT AND SURFACE PREPARATION**

___ ___

___ ___

___ ___

___ ___

___ ___

___ ___

___ ___

___ ___

___ ___

___ ___

11.1 Loader, platform and grapple stow will be pressure washed, prepared and painted to match existing colors.

11.1.1 New grapple assembly will be manufactures standard color.

11.2 Bonding agent will be applied to insure maximum adhesion of coating materials.

11.2.1 Bonding agent to be XIM Flash Bond 300 or equal.

11.3 Primer/sealer applied to be recommended by paint supplier.

11.4 Finish coat to be Sherwin Williams A**SUNFIRE**® acrylic urethane enamel or equal.

11.5 All products used will be applied in accordance with the Product Data Sheets.

11. **PAINT AND SURFACE PREPARATION** cont.

Meets Specs.

Yes No

- 11.6 Entire system will have a minimum of 4.0 mil dry film thickness.
- 11.7 Finish must be smooth, shiny, free of runs, overspray and other defects.
- 11.8 Please provide Product Data Sheets of proposed coating products with your bid.

12. **LIGHTING SYSTEM**

- 12.1 All existing F.M.V.S.S. 108 and emergency lighting and wiring will be removed.
- 12.2 All required F.M.V.S.S 108 lighting will be replaced with TruckLite or equal OEM quality lights.
- 12.3 Wiring harness for all 108 lighting will be one piece design with sealed light connectors.
- 12.3.1 Splices will be limited as much as possible but if required will be solder heat shrink connections.
- 12.3.2 Wiring will be loomed and securely attached using insulated stainless steel cable/wire clamps and stainless steel hardware.
- 12.3.2.1 The use of adhesive or frame clip type clamps is not acceptable.
- 12.4 Whelen ATowman's Edge Super-LED@60" light bar with the following:
- 12.4.1 Four (4) corner Linear Super-LED lamps (amber).
- 12.4.2 Four (4) front Linear Super-LED lamps (amber).
- 12.4.3 Two (2) front Halogen work lights.
- 12.4.4 Two (2) rear Halogen work lights.
- 12.4.5 One (1) right side Halogen alley light.
- 12.4.6 One (1) left side Halogen alley light.
- 12.4.7 Integral rear-facing Linear Super-LED six lamp Traffic Advisor, capable of producing a minimum of four (4) sequential flash patterns:
*A Left A Arrow, A Right A Arrow, A Split A Arrow; and a
A Cautionary A flash pattern (amber).*
- 12.4.8 Light bar will be installed on a fabricated mount bracket, off the front of the bulkhead.
- 12.5 Traffic advisor will be controlled through a under dash mounted Whelen ATACTRL1A@control base.
- 12.6 One (1) Whelen Power Control Center (#PCCHD1) under dash mounted, with switches labeled and wired as follows (left to right).
- 12.6.1 Front strobes.
- 12.6.2 Rear strobes.
- 12.6.3 Front work lights.
- 12.6.4 Rear work lights.
- 12.6.5 Right alley light.
- 12.6.6 Left alley light.
- 12.7 Golight Model 2020 with 49420 flood lamp, permanent mount work light installed in the center of the roof with dash mounted control.

Meets Specs.

Yes No

13. UNDER BODY TOOL BOXES

- ____ 13.1 Remove existing tool boxes.
- ____ 13.2 Furnish and install tool boxes as follows:
 - ____ 13.2.1 Curb side 30"L. x 20"D. x 30"H.
 - ____ 13.2.2 Street side 80"L. x 20"D. x 30"H.
- ____ 13.3 .125" polished diamond tread plate aluminum construction.
- ____ 13.4 Four sided weather shielded door frame.
- ____ 13.5 Gusseted bottom corners.
- ____ 13.6 Automotive style door gasket.
- ____ 13.7 Offset continuous stainless steel door hinge and stainless steel hardware.
- ____ 13.8 Single drop down door with adjustable chain door stays.
 - ____ 13.8.1 Doors to be reinforced with full liner to act as work area.
- ____ 13.9 Stainless steel folding T-handle latches.
- ____ 13.10 Key locks with all doors keyed alike.
- ____ 13.11 Two (2) 250 lb. capacity adjustable shelves in 30" box.
- ____ 13.12 Boxes will be RC Industries M-Series Custom or equal.
(RC Industries Phone #800-382-9511)

14. MISCELLANEOUS EQUIPMENT AND INFORMATION

- ____ 14.1 Replace all hazard, control, identification and warning decals.
- ____ 14.2 Replace complete seat assembly.
- ____ 14.3 Parts and service manuals for all new equipment provided.
- ____ 14.4 The City of Lincoln will provide a parts manual, operations manual, sales literature and annual inspection results (05/04/05) for the Prentice 120 RM hydraulic knuckle boom loader upon request.
- ____ 14.5 The successful bidder will assist the City of Lincoln in specification development for the new cab and chassis.

15. WARRANTY

- ____ 15.1 As a minimum the successful bidder will warranty materials and workmanship for a period of 12 months.
- ____ 15.2 Please include all warranty details and information with bid proposal.
- ____ 15.3 During the warranty period, it will be the responsibility of the successful bidder to perform warranty repairs F.O.B. Fleet Services Garage, 901 North 6th, Lincoln, NE. or at the successful bidder's discretion to transport the equipment to the successful bidder's place of business for such repairs.
- ____ 15.4 All transportation costs associated with warranty repairs will be the responsibility of the successful bidder.

16. DELIVERY

- ____ 16.1 The successful bidder will be responsible for delivery of the reconditioned fully installed hydraulic knuckle boom loader as specified, complete and ready for operation to include all manuals and accessory equipment to Fleet Services Garage, 901 North 6th, Lincoln, NE. on a prearranged date and time.

16. **DELIVERY** cont.

Meets Specs.

Yes No

16.2 The successful bidder will provide a minimum of 2 hours of operation and maintenance training at the time of delivery.

16.3 The replaced cab and chassis, grapple and PTO/pump will be delivered to the same location within 10 working days of the new equipment delivery date.

17. **OPTION (please price each separately)**

17.1 Additional cost to replace slewing ring and pinion gear.

17.2 Additional cost to replace all pivot pins.

17.3 Perform **A Break-In Period First 50 To 100 Hours** @ service and inspection as described in the **A Prentice Operator's Manual #0392"** at machine location, Fleet Services Garage, 901 North 6th. Lincoln NE., within 5 working days of notification.

PROPOSAL
SPECIFICATION NO. 05-140
BID OPENING TIME: 12:00 NOON
DATE: Wednesday, June 15, 2005

The undersigned, having full knowledge of the requirements of the City of Lincoln for the below listed phases and the contract documents (which include Notice, Instructions, this Proposal, Specifications, Contract, and any and all addenda) and all other conditions of the Proposal, agrees to enter into a contract with the City the below listed fees for the performance of this Specification, complete in every respect, in strict accordance with the contract documents at and for fees listed below.

ADDENDA RECEIPT: The receipt of addenda to the specification numbers ____ through ____ are hereby acknowledged. Failure of any submitter to receive any addendum or interpretation of the specifications shall not relieve the submitter from any obligations specified in the request. All addenda shall become part of the final contract document.

<u>Item</u>	<u>Qty.</u>	<u>Unit</u>	<u>Description</u>	<u>Unit cost</u>	<u>Total Cost</u>
1.	One (1)	Each	Recondition and Install Knuckle Boom Loader and Miscellaneous Associated Equipment	Lump Sum	\$_____
Options:					
2.	One (1)		Additional cost to replace slewing ring and pinion gear	Lump Sum	\$_____
3.	One (1)		Additional cost to replace all pivot pins	Lump Sum	\$_____
4.	One (1)		Perform A Break-In Period First 50 To 100 Hours @ service and inspection as described in the A Prentice Operator-s Manual #0392" at machine location, Fleet Services Garage, 901 North 6 th . Lincoln NE., within 5 working days of notification.	Lump Sum	\$_____

BID SECURITY REQUIRED: _____ **YES** X **NO**

AFFIRMATIVE ACTION PROGRAM: Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16). The Equal Opportunity Officer will determine compliance or non-compliance with the City's policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

The undersigned signatory for the bidder represents and warrants that he has full and complete authority to submit this proposal to the City, and to enter into a contract if this proposal is accepted.

RETURN 2 COMPLETE COPIES OF PROPOSAL AND SUPPORTING MATERIAL.
MARK OUTSIDE OF BID ENVELOPE: SEALED BID FOR SPEC. 05-140

COMPANY NAME

BY (Signature)

STREET ADDRESS or P.O. BOX

(Print Name)

CITY, STATE ZIP CODE

(Title)

TELEPHONE No. FAX No.

(Date)

EMPLOYER'S FEDERAL I.D. NO.
OR SOCIAL SECURITY NUMBER

ESTIMATED DELIVERY DAYS

E-MAIL ADDRESS

TERMS OF PAYMENT

Bids may be inspected in the Purchasing Division offices during normal business hours, **after** tabulation by the purchasing agent. If you desire a copy of the bid tabulation to be mailed to you, you must enclose a self-addressed stamped envelope with your bidding documents.

Bid Tabulations can also be viewed on our website at: Lincoln.ne.gov Keyword: Bid